

HLB=6.2; M.W.=1800).

Capmul 8210—mono/diglycerides of caprylic/capric acids (HLB=5.5–6.0; M.W.=250).

Table 14 supports:

- (1) Nonionics which have larger molecular weight (over about 1000) improve the cycle viscosity in the presence of electrolyte.

Example	Shear Thinning Factors		Shear Thinning Factor
	Viscosity (cps) at 1 sec ⁻¹	Viscosity (cps) at 10 sec ⁻¹	
1B	38,036	4,003	9.5
A	12,800	2,495	5
B	7,450	5,522	1.35
C	4,220	4,734	0.89
D	2,680	3,533	0.76

Examples A, B, C, and D are commercially available liquid personal cleansers, all packaged in pressure actuated pump containers. "A" is DOVE® Beauty Wash which claims to be a "non-soap" product. "B" is LIQUID IVORY® Soap, which is a K soap based product. "C" is Jergens Liquid Soap and is a synthetic surfactant based product. "D" is Liquid Dial. Example 1B has a very high viscosity at a shear rate of 1 sec⁻¹, but its high shear thinning factor (9.5) makes it possible to pump easily out of a pressure actuated pump. Examples B, C, and D have low shear thinning factors and, therefore, their viscosities are low to ensure pumpability.

Example 1B of the present invention is three times as viscous as DOVE® Beauty Wash and has a shear thinning factor about twice that of DOVE® Beauty Wash. A viscous product with a high shear factor is highly desirable for both pumpability and in use properties.

What is claimed is:

1. A very mild dispersoidal liquid soap personal cleansing composition comprising:

(A) from about 5% to out 20% by weight of potassium fatty acid soap;

(B) from about 2.5 to about 18% C₈–C₂₂ free fatty acid;

(C) from about 55% to about 90% water; and wherein said fatty acid (A) and (B) has an Iodine Value of from zero to about 15; and a titer (° C.) of from about 44 to about 70; wherein said soap and said free fatty acid have a weight ratio of about 1:0.3 to about 1:1; and wherein said product has a viscosity of from about 4,000 cps to about 100,000 cps at 25° C;

Wherein said composition is made by the following steps:

1. heating and mixing an aqueous mixture of said potassium fatty acid soap and said free fatty acid to provide a stable melt;
2. cooling the melt to about room temperature;
3. diluting said cooled melt with water to provide said dispersoidal liquid;

wherein said composition is contained in a container having a pressure actuated pump.

2. A liquid cleansing composition of claim 1 wherein said Iodine Value is less than 5 and said titer is from 50 to about 70.

3. A liquid cleansing composition of claim 1 wherein said Iodine Value is less than 3 and said titer is from about 62 to about 70.

4. A liquid cleansing composition according to claim 1 comprising from about 6% to about 14% by weight of said potassium soap and from about 3% to about 9% by weight of said free fatty acid.

5. A liquid cleansing composition according to claim 1 comprising from about 1% to about 10% of a high lathering synthetic surfactant.

6. A liquid cleansing composition according to claim 1 wherein the ratio of potassium soap to free fatty acid is from about 1:0.3 to about 1:0.8; and wherein said fatty acid is highly saturated and has an Iodine Value of from zero to about 10; and wherein said fatty acid is composed of alkyl chain lengths ranging from C₈ to C₂₂; and wherein said fatty acid has a titer of from about 62 to about 70, and wherein said composition contains from about 2% to about 6% of a higher lathering synthetic surfactant; and wherein said product has a viscosity of from about 10,000 cps to about 70,000 cps.

7. A liquid cleansing composition according to claim 6 wherein said fatty acid has an Iodine Value of from zero to 3 and wherein said synthetic surfactant is lauroyl sarcosinate with cations selected from the group consisting of sodium or potassium, and mixtures thereof.

8. A liquid cleansing composition according to claim 1 wherein said composition has a shear thinning factor of at least 1.5 up to about 25.

9. A liquid cleansing composition according to claim 8 wherein said factor is from about 2 to about 20.

10. A liquid cleansing composition according to claim 8 wherein said shear thinning factor is from about 3 to about 15.

11. A liquid cleansing composition according to claim 1 wherein said fatty acid is composed of chain lengths ranging from C₁₂ to C₁₈.

12. A liquid cleansing composition according to claim 1 wherein said composition contains from about 60% to about 80% water; from about 6% to about 14% said potassium fatty acid soap; from about 3% to about 9% said free fatty acid; and wherein said fatty acid has an Iodine Value of from zero to 3 and wherein said viscosity is from about 10,000 cps to about 70,000 cps.

13. A liquid cleansing composition according to claim 1 wherein said liquid composition has a shear thinning factor of from about 2 to about 10.

14. A dispersoidal liquid soap cleansing composition of claim 1 herein said cooled melt of Step 2 is stable. A

15. A dispersoidal liquid soap cleansing composition of claim wherein said soap and said free fatty acid of Step 1 are heated to a temperature of from about 75° C. to about 90° C.

16. A dispersoidal liquid soap cleansing composition of claim wherein said method includes deaeration of said liquid.

17. A dispersoidal liquid soap cleansing composition of claim wherein said cooling is conducted at a rate of about 0.5° C. per minute or slower.

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